AWIPS OB4 Release Notes

Section II - Discrepancy Report Fixes in Release OB4

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The following DRs have been fixed in AWIPS OB4.
They are fixes to problems opened against releases prior to OB4.

1.0   D2D/TEXT/OTHER APPLICATIONS

1.1   Climate

- When record snowfall is a trace, the output product has been corrected now to show T instead of -1. Previously, the user had to edit the product manually as necessary before transmission **(DR 13399)**

- When the greatest snow depth is T, the corresponding date is now stored in the database. Previously, when the greatest snow depth for a given month was a trace, *display_climate* wrote the daily value to the daily database, but not the corresponding date to the monthly database. The user had to modify the monthly database manually to insert the date, or edit the final product manually as necessary before transmission. **(DR 13401)**

- *display_climate* shows T for AVG and MAX snowdepth fields. **(DR 13403)**

1.2   Color Curve/Blinking/Image Combination

- User-created color curve works as designed when combining images and therefore this DR has been cancelled.
  Previously, when a user created a new color curve (one that shaded the freezing line on surface temperature for example), and then combined with another image, the newly created curve became distorted (i.e., the shaded region that before the combination highlighted the freezing line now shaded a different and larger range of temperatures on the part of the combined image). This was due to the 4-bit + 4-bit image combination algorithm. **(DR 1298)**

1.3   Display

- The window focus does not always follow the cursor. On the 3-headed Linux workstations, when moving the mouse from screen to screen, the window focus sometimes does not follow the cursor. That is, the window underneath the cursor is not always automatically activated after the mouse has moved from one screen to another.

   Workaround: Always maintain a "slice" of a root window between adjacent screens. That way the mouse will know which screen it is on before it moves over a window application in that screen. Alternatively, click mouse button one on a window header to

make it active. **(DR 13708)**

1.4   Local Storm Report (LSR)

● Manual PIL configuration capability is added. The field had expressed an interest in being able to manually provide the XXX, CCC, and wmoVar parts of the LSR PIL. The LSR GUI continues to get the PIL pieces as it does, but then it writes them to a file (and reads the file on subsequent runs) that can be manually edited if the WFO encounters a problem. **(DR 13615)**

● Very close spotter locations may cause the LSR GUI to crash. This problem does not occur on the Linux workstation, it was an HP-related issue. **(DR 11893)**

1.5   Radar

● A misleading error message can be produced by the One-Time Request application. Simply display the first dialog if the selected product is not valid and the second error dialog box will not appear after clicking "OK."
Previously, if the user tried to request the 256-level, 1-km res V product from the OTR (an invalid product), two dialog boxes appeared. The first reported that the 256-level V product must use res 0.25. When that error was dismissed, the second dialog box appeared, erroneously reporting that an error occurred while trying to send the OTR, when it was actually just reacting to the same invalid product specification noted in the first error dialog box. Even if the message were corrected to report an invalid product spec, since the user had been presented with an error dialog already, this second one should have been suppressed. **(DR 13495)**

● Data dropouts (missing images) do not occur in auto-updating radar loops with 4- and 8-bit reflectivity data anymore. Previously, in a 12 frame loop, it had been observed that, on average, two to three random images in the loop would be missing after about 30 minutes of letting new data auto-update. When the loop was reloaded after clearing the pane, then all data were present. The longer the loop runs, the more frames would become missing. This had been observed with 4- and 8-bit reflectivity in standalone or in combination with velocity. **(DR 13787)**

1.6   Surface

● METAR reports that do not have a lat/lon because the station ID is not in the station table do not get stored anymore. Previously, all METAR observations that went through the *MetarDecoder* process got stored in the netCDF files, even those for which we had no metadata (these were tagged in the log as "not in dictionary"). When such a station was stored, its latitude and longitude were set to -1, and the display plotted them at that

location. Few sites saw it since most did not have a scale on which this location appeared, but for those that did, it could be misleading. **(DR 13084)**

- The Snow Water Equivalent image is now displayed properly on D2D. Previously, the entire image was shifted about 1 degree to the east. **(DR 13676)**

1.7 System for Convection Analysis and Nowcasting (SCAN) and Flash Flood Monitoring Program (FFMP)

- The SCAN New Event Warning/Indication box works as designed, therefore this DR was withdrawn by its originator. **(DR 12627)**

1.8 *S*ystem on *A*WIPS for *F*orecasting and *E*valuation of *Se*as and *L*a*ke*s (SAFESEAS)

- When modifying values in the in SAFESEAS Configure Display Thresholds and Configure Monitor Thresholds windows monitor, the user can highlight a selected zone. Previously, the user could highlight the parameter values for other zones which could lead to confusion. **(DR 13335)**

- Running SAFESEAS with debug turned on may cause the application to crash. Leave debug turned off for SAFESEAS unless it is necessary to have it on for troubleshooting. **(DR 12954)**

1.9 Text Workstation

- The text window does not look for *siteCommission.txt* file before transmitting every product anymore, thus eliminating unnecessary overhead. **(DR 11807)**

- Highlighted text is readable in the Linux text workstation text windows. Previously, when text was highlighted in a text window on the Linux text workstation, the background was a whitish-yellow color and the text was white, making the text virtually unreadable. **(DR 12694)**

- The textdemo "start" script does not source *readenv.csh*. Previously, the textdemo "start" script did source *~fxa/readenv.csh*. This was unnecessary since *readenv.csh* was already sourced via textdemo's *.cshrc* upon login. More important, this multiple sourcing of *readenv.csh* and *environs.csh* led to globing problems ("Word too long" errors due to extra-large variable replacements). When it happened, the "start" script failed when it tried to source *readenv.csh*, resulting in the *textWS.tcl* and *hmMonitor.tcl* scripts not executing. **(DR 13605)**

- The *hmMonitor* closes when the Text Workstation closes**.** Previously, when the user exited the Text Workstation, the *hmMonitor* did not close and stayed up. So, when the user selected **Start TextWS** again, the Text Workstation started, but it also started a second *hmMonitor* process. As a result, multiple *hmMonitor* processes were running on the X-Term. This started occurring when the X-Terms were connected to the Linux Workstations. **(DR 13886)**

1.10 Tools

- Time setting problems that were evident with the D2D time-setting mechanism have been eliminated. **(DR 12344)**
  1. When a user selects **Set time** on D2D, specifies a time in the past, deselects **Freeze time at this position**, and selects **OK**, the clock sets back as it should. Previously the display did not pay attention to the time on the clock, instead loading current data. (The behavior was correct if **Freeze time at this position** was left in its default selected state.)
  2. Previously, if a user set the time back, then brought up the **Set time** dialog to adjust the time, the current real time was displayed in the dialog. Now the **Set time** radio button should be selected and the previously set displaced time should be displayed.
  3. If **Freeze time** is selected, the format of the clock on the display changes from *hh:mm Z dd-mmm-yy* to *dd-mm-yy hh:mm Z.* The same format should be used in all cases, letting the white on black or yellow on black color be the cue that the time displayed is not the current time.

1.11 Upper Air

- The KMXR sounding is displayed above 300 MB. **(DR 11367)**

- Displaying the interactive Skew-T for winds-only output (e.g., VWP winds, profiler) works. **(DR 12941)**

1.12 Volume Browser/Grid Products

- The Sea Ice Cover product has no units **(DR 13531)**. New DR has been written to remove the product from the Volume Browser. **(DR 14867)**

2.0 WATCH WARNING ADVISORY(WWA)

- WWA does not crash if launched after GFE on a workstation. Previously, if WWA was launched on a workstation that already had GFE running, WWA failed to start up and crashed. However, if WWA was started first, and then GFE was started, both applications did run concurrently. WWA could even be exited and restarted successfully with GFE still running, as long as WWA was the first of the two applications to be launched. **(DR 10471)**

- The WOU products represented in the new WOU GUI are automatically ordered. **(DR 13663)**

- The WCN new template file names defined in the WWA char database match the actual names of the NWR template files. Also, the WCN template files changed from zone based to county based in the template itself. **(DR 13664)**

- Spell check enhancements were applied and the search function is working correctly. **(DR 13665)**

- The WWAAdmin Hazard panel does indicate changes made before a save. **(DR 13666)**

- Monitor refresh does not slow down when many products are in use now. Previously, whenever many products appeared in the Monitor, and many rows of data were in the status table, WWA experienced an extreme slowdown of the Monitor refresh. Local testing with 150 rows of data in the status table caused 30 seconds to pass during refresh, while during an actual event LWX, BOX, and GYX experienced 1 - 4 minute lapses while the Monitor was refreshing given similar amounts of data. **(DR 13667)**

- Products can be issued out to seven days. The new NWS Directives allow for outlook-type products, such as Frost/Freeze Outlook, to be issued out to seven days in advance of the actual event. Previously, in the WWA Composer, the maximum duration was 99 hours, or approximately 4 days. **(DR 13747)**

- The *ProdExp* time is updating in the Composer correctly. Previously, the *ProdExp* field was not updating when you followed up or cleared a hazard and the Composer came up. It remained the issuance time plus the offset time, rather than the current time plus the offset time. **(DR 13748)**

3.0 HYDROLOGY

3.1 HydroBase

- The two problems with the check feature in HydroBase's SHEF decoder restart window have been corrected.
  1. The information shown in the window is from the current time Check was run.
  2. The time shown for the start of *shefdecode* is in GMT. **(DR 13624)**

3.2 HydroMap/Multisensor Precipitation Estimate (MPE)

- HMAP/MPE does not crash when time lapse is started. Previously, the crash most often occurred when a time lapse was started, then ended, and a new time lapse was started for more hours than the original time lapse, or when a time lapse for a large number of hours

(e.g., 24) was started. **(DR 12843)**

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3.3 SiteSpecific

● On Linux, SiteSpecific does start from HydroMap when HydroMap is started from D2D. Previously, if the user selected HydroView from the Hydro Apps submenu in the NCEP/Hydro menu of D2D, and then started SiteSpecific from the LiveData menu of HydroMap, SiteSpecific did not start. **(DR 10665)**

● SiteSpecific does start from the D2D NCEP/Hydro menu on Linux. Previously, if the user selected HydroView from the Hydro Apps submenu in the NCEP/Hydro menu of D2D, and then started SiteSpecific from the LiveData menu of HydroMap, SiteSpecific did not start. **(DR 11401)**

3.4 HydroView

● PDC GUI does not display correctly upon launch **(DR 13900)** . The PDC GUI has been removed from the NCEP/Hydro Menu **(DR 14044)**.

4.0 LOCAL DATA ACQUISITION AND DISSEMINATION (LDAD)

4.1 Emergency Manager Decision Support (EMDS - Web Dissemination)

● *hmIngest* successfully processes the XXXRRSXXX text product. The RRS product is received and ready for display in Web Dissemination. **(DR 13474)**

4.2 Fax

● The *sendFax.tcl* script has been removed from */awips/fxa/ldad/bin*. The *sendFax.tcl* script now lives in */awips/fxa/bin*. **(DR 13672)**

5.0 SYSTEM

5.1 Failover/Reboot

● The *ingProcMon* process stops on AS1 when failing the AS2 swap (*as2swap*) package back to AS2. Previously, the *ingProcMon* process for AS2 sometimes continued to run on AS1 following the failback of *as2swa*p to AS2, in addition to starting up again on AS2. The process summary for AS2 in the Text row of the Netscape Monitor would

report it being down. **(DR 12639)**

- When DS1 crashes, the dedicated *ORPGCommsMgr* TCP/IP connection does not fail on DS2. Previously, when DS1 crashed, the *dsswap* package moved over to DS2 but the dedicated *ORPGCommsMgr* TCP/IP connection then failed on DS2. This was because when DS1 recovered, the *fxa* cron was resident there and tried to start up the *ORPGCommsMgr* process prior to the *dsswap* restart on DS2. This sequence of events resulted in the ORPG (radar side) opening up the link with the DS1 process instead of the DS2 process. **(DR 13582)**

- SUA products do store locally to the *textdb* while on DS2. Previously, the SUA products did not store locally to the database while the *dsswap* package was running on DS2. An error message appeared in the *preprocessSUA.log* file stating:
  "Failed to store product to text database."
  When executing the *textdb -w* command from the command line, the following error appeared:
  "Incoming product is a duplicate in the database. Product will not be stored."
  This is despite the fact that the product was not a duplicate. **(DR 13629)**

- APS products get stored to the *textdb* after a DS failover. Previously, when a text file was sent from the bubble application into AWIPS after a DS failover, a failure occurred storing the product to the text database. The following error appeared in the APS log:
  TextDBConnection.C PROBLEM: Failure writing to textdb **(DR 13640)**

- Configure Autofax does not fail to send faxes while failed over on DS2. **(DR 12567)**

5.2   General

- Previously, the home directories were writeable by group and world which caused problems with GDM and xauthority files. Linux expected the */awips/fxa/awipsusr* and */awips/fxa/textdemo* directories to be unwriteable by group and world (755). But since they were 775, the Gnome Display Manager (GDM) created *xauth* files in */tmp* instead of using the files in the home directory. This caused some applications to fail to launch due to lack of authority. Then the user had to change the permissions on the */awips/fxa/awipsusr* and */awips/fxa/textdemo* directories to 755 if they were not already set to that. This is OBE for OB4 since *awipsusr* and *textdemo* are no longer general login accounts. This issue does not impact individual accounts since the permission on the individual home directories is 750. **(DR 13201)**

- The Perl Tcl/Tk extensions are now included in the Perl package delivered with AWIPS. **(DR 13786)**

- User should only log out of the workstation from the middle display (0.0). **(DR 14614)**

- The red banner event messages get raised to the top when a new message is generated. Previously, the Urgent message window (red banner) popped up to alert the D2D user to certain problems or events, such as a server swap was in progress, or a radar connection had gone down. If the user iconified the window, a subsequent message would cause it to deiconify and appear in front so that the user could see it. However, if the user pushed the window behind other windows (e.g., by clicking on the title bar of D2D), new messages would not cause the window to come back to the front, possibly resulting in the user missing important information. **(DR 11372)**

5.3   Localization/Installation

- No *chmod* errors are displayed now during the ADAPPT install. **(DR 13521)**

5.4   Printing

- The SEL products do print from a Linux textworkstation. Previously, this problem was due to special characters embedded near the start of the document. This caused *a2ps* to think that the document was binary, thus it did not get printed from a text window. The solution involved adding the option "--print-anyway=yes" to the Linux *print* command in *textPrint.tcl* script. **(DR 13553)**

5.5   Product/Process/System Monitoring

- The native Linux Browser (Mozilla or Konqueror) is set up for AWIPS Netscape Bookmarks. **(DR 13361)**

- The main ingest restart log breaks if it becomes greater than 100K. **(DR 13512)**

- SAFESEAS is included now in ingest restart. **(DR 13515)**

5.6   Radar System

- All One-Time Request messages are now displayed in the Radar Status Window. Previously, not all of the messages typically received when performing a one-time request were displayed in the Radar Status window. For example, when making a request, the GSM messages were displayed, but the messages that the requested product has been stored and that the line has been disconnected were not, even though these events did occur. These messages were not displayed until another request is sent. The user had to check the radar logs to verify product receipt, or select the product from the D2D menu to see if it had been stored. **(DR 13143)**

5.7   System Process/Log

- The master purge log no longer reports the following errors when purging some directories:**- unlink 12hr FAILED: Not owner.** The offending message occurred when *purge_subs* hit a directory of directories with more than number-to-keep entries. At the cost of trivial amount of processing, we now check to see if the item in question is a directory, and do not attempt to remove it if it is.   **(DR 11412)**

- The *notificationServer* does not crash on a non-existent product version. Previously, the *notificationServer* crashed while attempting to request a version of a product that did not exist. **(DR 13475)**

- The *asyncScheduler* process log reflects a PID number that is the same as the active process. **(DR 13738)**

- The *AircraftDecoder* process does not crash.
Infrequently, the *AircraftDecoder* had crashed with a Signal 11 segmentation violation. When this would happen, the AS1 CPU idle time would go to 0%, with the *AircraftDecoder* process running at the top of the list. **(DR 10910)**

6.0   Additional Radar-Related DRs

- Previously, three 4-panel radar products could not be displayed from the *kxxx* four panel pull down: Comp 0.5 VIL mx, VIL Comp Max2 Max 3, and Tot 1hr 3hr 0.5.   The IGC_Process log will report 'Unable to read key: <depict key> from the MultiLoad table.' **(DR 13989)**

- All Tilts Z/SRM8 loads correctly. Previously, when loading the All Tilts Z/SRM8 product occasionally the 4-bit 0.5 Reflectivity loads then an error message would have appearred saying the 8-bit data were unavailable. After a pause of up to one minute, the data would then load. This was seen for each elevation angle. It has also been seen where the error message appearred but the 8-bit data was loaded as soon as it was available from the ORPG. The 4-bit data did not display at all. **(DR 13990)**

7.0   Additional WarnGen Related DRs

- WarnGen correctly interprets template variables in logical operators that control bullets. **(DR 13979)**